

ABSTRACT

A fast on-line data flow allocation method efficiently determines the allocation of data flow among data paths, particularly when a parameter that influences data flow allocation is changed dynamically. In an illustrative embodiment, at least one commodity flow sample point is determined and a continuous boundary is constructed through the sample points. The continuous boundary (characterized as Maximum Flow Frontier) can be constructed off-line and may be used to determine new data flow allocations when a data flow allocation parameter changes. By developing a continuous boundary data flow, allocation parameters can be determined using a limited number of sample points. This can reduce the allocation complexity, and permit efficient data flow allocation.